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Permit Type: New
Approved: Yes

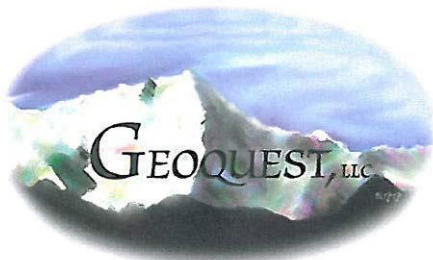
Owner: Villagree, LLC Address: 5290 Saxton Hollow Rd, Colorado Springs CO 80908 Approved No. Bedrooms: 5
Water supply: Well Well Installation verified: 7.23.2020 Well Location GPS: 39°01.782'N -104°44.089'W
Approval will be revoked if in the future any well is found to be within 50 feet of the septic tank and/or 100 feet of the soil treatment area.

High Rock Content: N/A	Soil (in-situ) Type: 3A	LTAR (In-situ soil): 0.3	Limiting Layer: <u>Groundwater:</u> NONE	<u>Bedrock:</u> NONE
OWTS Tank:	<u>Capacity (gallons):</u> 1500	OWTS Pump Tank:	<u>Capacity (gallons):</u> N/A	
Soil Treatment Area (STA):	<u>Sq. Ft. (10-1):</u> 2000	<u>Sq. Ft. (10-2):</u> 2400	<u>Sq. Ft. (10-3):</u> 1680	<u>Sq. Ft. (with Diverter Valve):</u> N/A
NDDS (STA):	<u>Sq. Ft. (10-1):</u> N/A	<u>NDDS Factor:</u> N/A	<u>Sq. Ft. (NDDS adjustment):</u> N/A	
Mound (STA):	LTAR (imported soil): N/A	Chamber adjustment: N/A	Distribution Area: N/A	Basal Area: N/A

Design Engineer: Geoquest LLC Engineer design #: 19-0489
Date engineer record drawing/certification letter recieved: 5.9.2024
Tier II Licensed Installer: AAA Bobcat(Olson Excavating

Treatment Level: 1		
Annual Operation and Maintenance Inspection: Not Required		
OWTS Tank: <u>GPS Location:</u> 39°01.792'N -104°44.107'W		
<u>Tank Type:</u> New Poly	<u>Capacity (gallon):</u> 1530	
OWTS Pump Tank:		
<u>Tank Type:</u> NA	<u>Capacity (gallon):</u> N/A	<u>Audio/Visual Alarm:</u> N/A
OWTS Pump: N/A		
<u>Gal/dose:</u> N/A	<u>Flow(gpm):</u> N/A	<u>Total Dynamic Head:</u> N/A
Soil Treatment Area (STA): <u>GPS Location:</u> 39°01.778'N -104°44.140'W		<u>Total Sq. Ft installed:</u> 1800
<u>Configuration:</u> Bed	<u>Distribution:</u> Gravity	
<u>Distribution Media:</u> Chambers	<u>Infiltrative Surface Depth:</u> 10 – 36"	
<u>Distribution Area Length:</u> 150'	<u>Distribution Area Width:</u> 12'	
<u>Basal Area Length:</u> N/A	<u>Basal Area Width:</u> N/A	
<u>Media Type:</u> Arc 36 LP (15 sq/ft)	<u>Total installed:</u> 120 chambers	

Revised November 2019



27 August 2020

6825 Silver Ponds Heights #101
Colorado Springs, CO 80908
(719) 481-4560

El Paso County Health Department
1675 West Garden of the Gods Road
Colorado Springs, Colorado 80907

Re: Septic System Inspection, GQ #19-0489
Lot #3, Filing #1,
Cathedral Pines Subdivision,
5290 Saxton Hollow Road,
El Paso County, Colorado

Dear Sir or Madam,

We inspected the installation of the engineered septic system at the above address at several points during its construction as well as the finished product. It has been installed in accordance with our engineered plans and specification. This includes having the correct size septic tanks, the proper grade on all pipes and sections of the absorption field, the correct depth, size and configuration of the absorption field, and the backfill around and over the field.

The field should be seeded in the future to allow for vegetation growth next spring. Additional grading may be required in the future to repair any minor erosion areas until the grass seed takes hold. You should ensure that no vehicles are allowed to park on any portion of the system.

The system is ready for final certification from the El Paso County Health Department. **A Certificate of Occupancy (CO) will not be issued by PPRBD until El Paso County Health Department has received this letter and the Record Drawing.** Please call me if you have any questions.

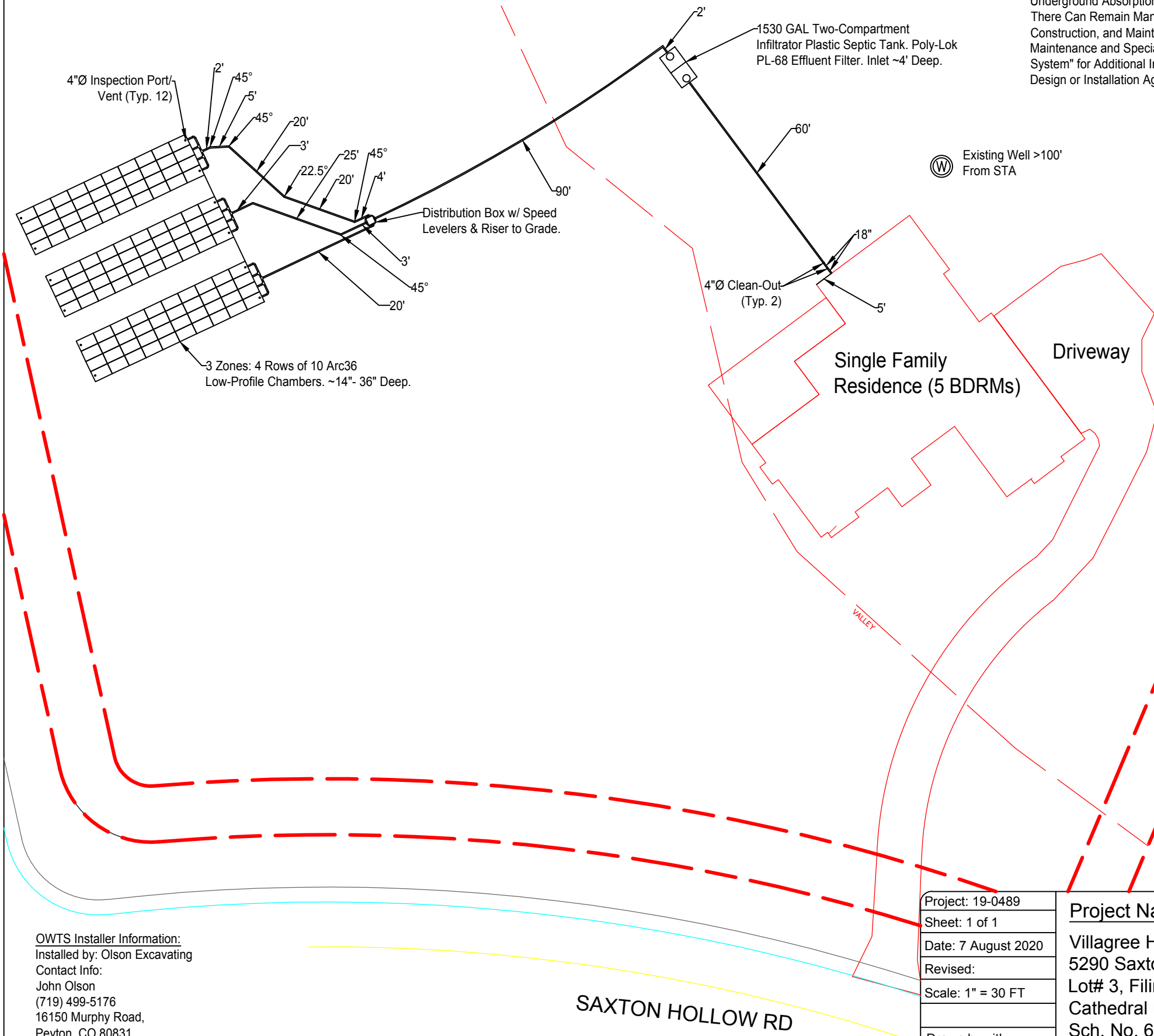
Sincerely,

Charles E. Milligan
Civil Engineer

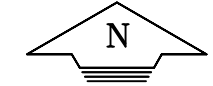


On-Site Wastewater Treatment System (OWTS) Record Drawing

Geoquest, LLC. has Provided this Design in Accordance with the Standards of Practice Common to the Area. However, as with All Underground Absorption Fields, Guarantee from Failure is Impossible. Even with Proper Installation, as Outlined for this Proposed Construction, There Can Remain Many Uncertainties, and Difficulties Can Still Arise in the Operation of the System in the Future. Proper Design, Construction, and Maintenance can Assist in Minimizing Uncertainties, but Cannot Entirely Eliminate Them. Homeowners Should be Advised of Maintenance and Special Considerations for Septic Systems. Refer to El Paso County Public Health Brochure: "Maintaining Your Septic System" for Additional Information. Due to the Possibility of Unknown Water Usage Factors, Geoquest, LLC. Provides No Warranty of this Design or Installation Against Failure or Damage of Any Type.



Existing Well >100'
From STA



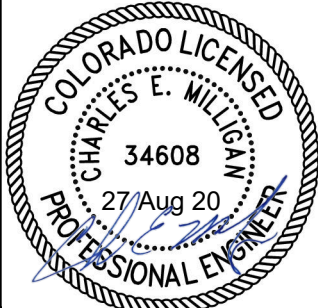
0 10 20 30
GRAPHIC SCALE IN FEET
SCALE: 1" = 30'

OWTS Installer Information:
Installed by: Olson Excavating
Contact Info:
John Olson
(719) 499-5176
16150 Murphy Road,
Peyton, CO 80831
Installation Inspection Performed on: 07/23/2020
Final Inspection Performed on: 07/28/2020

Project: 19-0489	Project Name and Address Villagree Homes 5290 Saxton Hollow Road, Lot# 3, Filing #1 Cathedral Pines Subdivision Sch. No. 6201005003 El Paso County, Colorado
Sheet: 1 of 1	
Date: 7 August 2020	
Revised:	
Scale: 1" = 30 FT	
Drawn by: jtk	
Checked by: cem	

GEOQUEST, LLC.
6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204



Attn: VILLAGREE LLC
5290 SAXTON HOLLOW RD
COLORADO SPRINGS, CO 80908

Notify Environmental Health of any change of ownership, type of business activity, business name, or billing address by calling (719) 578-3199. Failure to notify Environmental Health may result in late penalties, Permit/License denial or revocation, and business closure. PERMITS/LICENSES TO OPERATE AND ANNUAL FEE PAYMENTS ARE NOT TRANSFERABLE. Permits become void on change of ownership. New owners must apply and pay for a new Permit(s)/License(s) prior to beginning operation.



**EL PASO COUNTY PUBLIC HEALTH
ENVIRONMENTAL HEALTH DIVISION**
1675 W. GARDEN OF THE GODS ROAD, SUITE 2044
COLORADO SPRINGS, CO.80907
PHONE: (719) 578-3199 FAX: (719) 578-3188
www.elpasocountyhealth.org

NEW SYSTEM PERMIT - OWTS

Valid From 10/2/2019 To 10/2/2020

PERMITEE :

VILLAGREE LLC
5290 SAXTON HOLLOW RD
COLORADO SPRINGS, CO 80908

Onsite ID: ON0036293

Tax Schedule # : 6201005003

Permit Issue Date: 10/02/2019

Dwelling Type: RESIDENTIAL

of Bedrooms (if Res): 5

Proposed Use (if Comm):

Designed Gallons/Day:

Water Source: PRIVATE WELL

OWNER NAME :

VILLAGREE LLC

System Installation Requirements:

- An Engineered OWTS system to be installed on site due to encountering USDA Soil Type 3A, requiring a Tier II licensed installer.
- System installation to include a gravity fed system with d-box to chamber in a bed configuration, max installation depth of 36" is required by the engineer. Minimum tank requirements 1500 gallon and 1680 sq ft of soil treatment area (140 Q4 / 112 Arc 36 chambers required).
- The system must be installed per approved Geoquest, LLC design document #19-0489 stamped and dated 7.2.2019, changes to the approved design document must be submitted and approved by Public Health prior to installation.
- All horizontal setbacks must be maintained through system installation. In addition system must remain completely uncovered, including the tank size, for final inspection.
- The well must be installed at time of final inspection, or final approval will not be given until well installation is verified.
- Engineered systems require the as built drawing and certification letter from the engineer be submitted to Public Health prior to final approval and Regional Building sign off
- Ensure that all work is completed prior to contacting and requesting final line for inspection, otherwise additional fees may be incurred.

Net Mary

Attn: VILLAGREE LLC
5290 SAXTON HOLLOW RD
COLORADO SPRINGS, CO 80908

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**EL PASO COUNTY PUBLIC HEALTH
ENVIRONMENTAL HEALTH DIVISION
1675 W. GARDEN OF THE GODS ROAD, SUITE 2044
COLORADO SPRINGS, CO 80907
PHONE: (719) 578-3199 FAX: (719) 578-3188
www.elpasocountyhealth.org**

This permit is issued in accordance with 25-10-106 Colorado Revised Statutes. The PERMIT EXPIRES upon completion/installation of the Onsite Wastewater Treatment System, or at the end of twelve (12) months from date of issue, whichever occurs first. If both a Building Permit and an Onsite Wastewater Treatment System Permit are issued for the same property and construction has not commenced prior to the expiration date of the Building Permit, the Onsite Wastewater Permit shall expire at the same time as the Building Permit. This permit is revocable if all stated requirements are not met. The Onsite Wastewater Treatment System must be installed by an El Paso County Licensed System Contractor, or the property owner.

The Health Officer shall assume no responsibility in case of failure or inadequacy of an Onsite Wastewater Treatment System, beyond consulting in good faith with the property owner or representative. Access to the property shall be authorized at reasonable time for the purpose of making such inspections as are necessary to determine compliance with the requirements of this law (permit).

Inspection request line: Call (719) 575-8699 before 3:30 p.m. the business day prior to the requested inspection date.

Authorized By: Environmental Health Specialist

530012665 AR0016683 ON00036293

APPLICATION FOR AN ON-SITE WASTEWATER TREATMENT SYSTEM PERMIT

Property Information:

Property Address: 5290 Saxton Hollow Road Legal _____ City and Zip: Colorado Springs 80908

Description: Lot 3 Cathedral Pines Sub Fil No.1

Tax Schedule #: 6201005003 Lot size: 2.51

Is the property gated: ☐ Yes ☐ No Please provide a gate code if necessary: _____

Site Located Inside City Limits: ☒ Yes ☐ No Proposed Use: ☒ Residential ☐ Commercial

Water Supply: ☒ Well ☐ Cistern ☐ Municipal Potential Number of Bedrooms: 5

Has a Conditional Acceptance Document been issued for this property: ☐ Yes ☐ No ☐ Unsure

Owner Information: ☐ Primary Contact

Owner: Villagree, LLC Daytime Phone: (719) 651-7577

Owners Mailing Address: 8585 Criterion Dr. #62704, Colorado Springs, CO 80962

Email Address: info@villagree.com Fax #: _____

General Contractor: Elaine Cawfield Phone/Email: (719) 651-7577

OWTS Installer Information: ☐ Primary Contact

System Installer: JR Olson Excavating Daytime Phone: (719) 499-8038

Email Address: jrolsonex@aol.com Licensed installer: ☐ Tier 1 ☒ Tier 2

All engineer-design systems must be installed by a Tier 2 licensed installer

CURRENT FEES AS APPROVED BY THE EL PASO COUNTY BOARD OF HEALTH

All payments are due at the time of application submittal; by cash, check or major credit card (Visa / MC)

- ☐ **New Permit:** \$750.00 (EPCPH Charge) + \$147.00 (EPC Planning Dept. Surcharge) + \$23.00 (CDPHE Surcharge) = \$920.00
- ☐ **Major Repair Permit:** \$535.00 (EPCPH Charge) + \$23.00 (CDPHE Surcharge) = \$558.00
- ☐ **Minor Repair Permit:** \$245.00 (EPCPH Charge) + \$23.00 (CDPHE Surcharge) = \$268.00

Permits expire one year from date of issuance, unless otherwise noted

REQUIRED: Provide a complete written scope of work to be performed on the property.

Install new septic system for new home construction.

The following documents MUST be included with your application.

- A soils report: including at least 1 soil profile excavation pit, in accordance with section 8.5 A-F of OWTS regulations
- A clear and legible design document: including the proposed and alternate locations, as well as system layout, labeled with all setbacks to pertinent structures and features in table 7-1.
- Provide directions to property, from a main highway, on the back side of application.

Failure to provide the above listed documents may result in denial of the permit application

I certify that the information provided on this application is in compliance with Section 8.3, Chapter 8 of the On-site Wastewater System (OWS) Regulations of the El Paso County Board of Health. I also authorize the assigned representative of El Paso County Public Health to enter onto this property in order to obtain information necessary for the issuance of a permit.

Applicant Signature: Elaine Cawfield Date: 9/30/2019

Neil

- Property address or lot number must be clearly marked and visible from the road.
- Profile excavation test pit and/or soil profile holes must be clearly marked
- Proposed and alternate soil treatment areas must be protected from compaction and disturbance
- Locked gates require the gate code or lock combination be provided on front of application
- Please provide directions to the property from a main highway, by text or picture, below.

Failure to comply with the above information may result in an additional charge for a return trip.

Permit #: _____ Site Inspection date: 10/1/19

Date Approvals Rcvd: Development Services: 10/1/19 Floodplain/enumerations: N/A

Design: ☐ Conventional ☒ Engineer Design Engineer: Geoguest, LLC

Engineer Job #: 19-0489 Engineer Date Stamped: 7.2.19

LTAR/Soil Type: 0.30 / 3A Groundwater: — PP1/ — PP2 Bedrock: — PP1/ — PP2

Minimum Requirements: Tank Capacity: 1500 Soil Treatment Area: 1680

System Feed: ☒ Gravity ☐ Pump to Gravity ☐ Pressure Dosed ☐ Other: _____

System Media: ☒ Chambers ☐ Rock and Pipe ☐ Other Soil Treatment Area: ☐ Trenches ☒ Bed

Additional Comments: _____

E.H. Specialist: Neil May Date: 10/2/19 ☒ Approved ☐ Denied



6825 Silver Ponds Heights #101
Colorado Springs, CO 80908
(719) 481-4560

PROFILE PIT EVALUATION

FOR

VILLAGREE HOMES

JOB #19-0489

Lot #3, Filing #1,
Cathedral Pines Subdivision,
5290 Saxton Hollow Road,
El Paso County,
Colorado

Sincerely,


Charles E. Milligan, P.E.
Civil Engineer



PROFILE PIT FINDINGS

Enclosed are the results of the profile pit for the septic system to be installed at **Lot #3, Filing #1, Cathedral Pines Subdivision, 5290 Saxton Hollow Road, El Paso County, Colorado**. The location of the test pit was determined by Villagree Homes. The residence will not be on a public water system. The number of bedrooms in the design for the residence is unknown. Due to the natural slope of the property, the entire system will feed to the north to northwest at approximately 12% at least 20 feet. All applicable portions of the El Paso County Health Department Onsite Wastewater Treatment System Regulations (OWTS) must be complied with for the installation of the treatment system.

The inspection was performed on June 3, 2019, in accordance with Table 10-1 of the **E.P.C.P.H. OWTS Regulations**.

Soil Profile #1:

- 0 to 8"** - Topsoil - loam, organic composition.
- 8" to 8'** - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, reddish yellow in color, 5 YR 6/8.

Soil Profile #2:

- 0 to 8"** - Topsoil - loam, organic composition.
- 8" to 35"** - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, yellow in color, 10 YR 7/6.
- 35" to 8'** - USDA soil texture sandy clay loam, soil type 3A, structure shape massive, structure grade 0, weakly cemented, LTAR 0.30, white in color, 10 YR 9/1.

Groundwater was not encountered during the inspection. Bedrock was not encountered during the inspection. No known wells were observed within 100 feet of the proposed system. **All setbacks shall conform to county regulations.**

Due to encountering USDA soil type 3A, the septic system to be installed on this site shall be designed by a Colorado Licensed Engineer. Based on the observed conditions, we feel a design based on an LTAR of 0.30 GPD/SF (USDA 3A, treatment soil, treatment level 1) is reasonable. Maximum depth of the installation shall not be deeper than 3 feet below the existing grade.

If during construction of the field itself, subsurface conditions change considerably or if the location of the proposed field changes, this office shall be notified to determine whether the conditions are adequate for the system as designed or whether a new system needs to be designed.

Weather conditions at the time of the test consisted of cloudy skies with hot temperatures.

PROFILE PIT LOG - Profile Pit #1

JOB#: 19-0489
DATE EVALUATED: 03 Jun 2019
EQUIPMENT USED: MINI-EXCAVATOR

0"-8" TOPSOIL

Loam
Organic Composition

8"- 8' Sand

Fine-coarse Grained
Moderate Density
Moderate Moisture Content
Low-moderate Clay Content
Low-moderate Cohesion
Low-moderate Plasticity
Reddish Yellow Color
5YR 6/8

USDA Soil Texture: Sandy Loam
USDA Soil Type: 2A
USDA Structure Shape: Granular
USDA Structure Grade: 1
Cementation Class: Non-cemented
Long Term Acceptance Rate (LTAR, Treatment Level 1):0.50

DEPTH (in ft.)	SYMBOL	SAMPLES	WATER %	SOIL TYPE
0	32A			
2				
4				2A
6				
8				
10				
12				
14				

LTAR to be Used for OWTS Sizing: 0.30GPD/SF (USDA Type 32A, Treatment soil, Treatment Level 1)

Depth to Groundwater (Permanent or Seasonal): Not Encountered

Depth to Bedrock and Type: Not Encountered

Depth to Proposed Infiltrative Surface from Ground Surface: Max. 3' Deep

Soil Treatment Area Slope and Direction: NNW @ 12%

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 19-0489
Sheet: 1 of 2
Date: 13 Jun 2019

Scale: 1/4" = 1'
Drawn by: mtj
Checked by: cem

Project Name and Address

Villagree Homes

5290 Saxton Hollow Rd
Lot 3, Filing 1
Cathedral Pines
Sch. No. 6201005003
El Paso County, Colorado

GEOQUEST, LLC.

6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204

PROFILE PIT LOG - Profile Pit #2

JOB#: 19-0489
 DATE EVALUATED: 03 Jun 2019
 EQUIPMENT USED: MINI-EXCAVATOR

0"-8" TOPSOIL

Loam
 Organic Composition

8"-35" Sand

Fine-coarse Grained
 Moderate Density
 Moderate Moisture Content
 Low-moderate Clay Content
 Low-moderate Cohesion
 Low-moderate Plasticity
 Yellow Color
 10YR 7/6

USDA Soil Texture: Sandy Loam
 USDA Soil Type: 2A
 USDA Structure Shape: Granular
 USDA Structure Grade: 1
 Cementation Class: Non-cemented
 Long Term Acceptance Rate (LTAR, Treatment Level 1):0.50

35"- 8' Sand

Fine-coarse Grained
 Moderate-high Density
 Moderate Moisture Content
 Moderate Clay Content
 Low-moderate Cohesion
 Low-moderate Plasticity
 White Color
 10YR 9/1

USDA Soil Texture: Sandy Clay Loam
 USDA Soil Type: 3A
 USDA Structure Shape: Massive
 USDA Structure Grade: 0
 Cementation Class: Weakly
 Long Term Acceptance Rate (LTAR, Treatment Level 1):0.30

DEPTH (in ft.)	SYMBOL	SAMPLES	WATER %	SOIL TYPE
0-2	RR			2A
2-8	RR			3A
8-10				
10-12				
12-14				
14-16				
16-18				
18-20				
20-22				
22-24				
24-26				
26-28				
28-30				
30-32				
32-34				
34-36				
36-38				
38-40				
40-42				
42-44				
44-46				
46-48				
48-50				

LTAR to be Used for OWTS Sizing: 0.30GPD/SF (USDA Type 3A, Treatment soil, Treatment Level 1)
Depth to Groundwater (Permanent or Seasonal): Not Encountered
Depth to Bedrock and Type: Not Encountered
Depth to Proposed Infiltrative Surface from Ground Surface: Max. 3' Deep
Soil Treatment Area Slope and Direction: NNW @ 12%

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be Implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 19-0489

Sheet: 2 of 2

Date: 13 Jun 2019

Scale: 1/4" = 1'

Drawn by: mtj

Checked by: cem

Project Name and Address

Villagree Homes

5290 Saxton Hollow Rd
 Lot 3, Filing 1
 Cathedral Pines
 Sch. No. 6201005003
 El Paso County, Colorado

GEOQUEST, LLC.

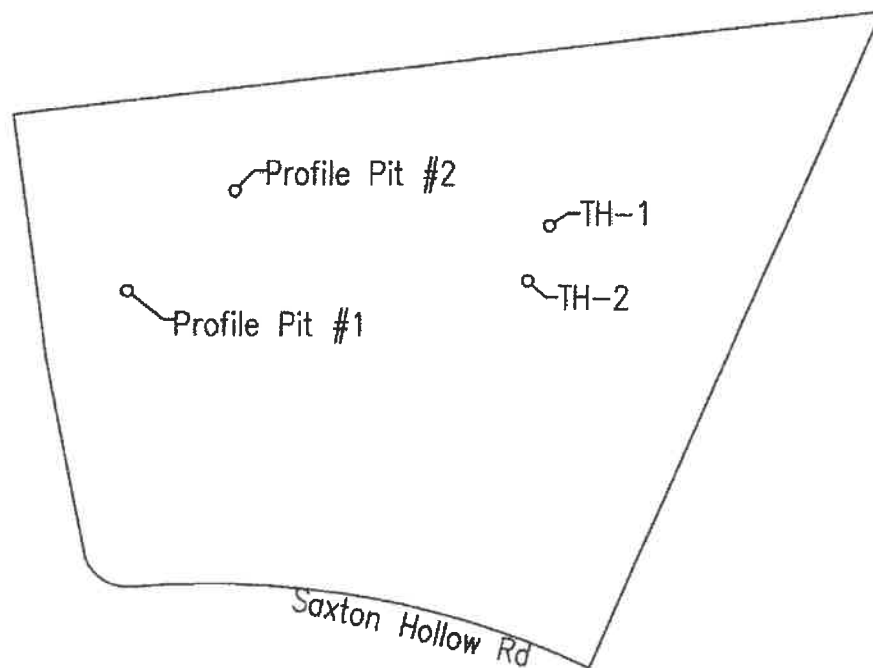
6825 SILVER PONDS HEIGHTS
 SUITE 101
 COLORADO SPRINGS, CO
 80908

OFFICE: (719) 481-4560
 FAX: (719) 481-9204

GEOQUEST LLC

SITE MAP

Lot 3, Filing 1
Cathedral Pines
5290 Saxton Hollow Rd
El Paso County
Colorado
Job #19-0489



Location from Northwest Lot Corner to Profile Pit #1:

S. 33° E. - 112'

Location from Profile Pit #1 to Profile Pit #2:

N. 46° E. - 77'

GPS Coordinates:

Pit 1; N. 39° 01' 46.66" W. 104° 44' 08.30"

Pit 2; N. 39° 01' 47.18" W. 104° 44' 07.67"



0 25 50 75 100
GRAPHIC SCALE IN FEET
SCALE: 1" = 100'

Cover Page

CALCULATIONS (New OMTS):

Proposed Single Family
Residence with 5 Bedrooms

LTRAR = 0.30 Gallons per Day per
Square Foot (GPD/SF), USDA Soil
Type 3A per Profile Pk 6/3/2019.

Q = (3 BDRM)(50 GPD)(2 BDRM)(75 GPD)
Q = 600.0 Gallons per Day (GPD)

A = $\frac{Q}{LTRAR} = \frac{600.0 \text{ GPD}}{0.30 \text{ GPD/SF}}$

A = 2,000.0 SF

Gravity Fed Chamber Beds:

A = (2,000.0 SF)(1.2)(0.7)

A = 1,680.0 SF Required

CHAMBER BED SYSTEM (Gravity Fed):

Infiltrator Systems Inc. Quick 4 Standard Chambers

Chambers = SF ROD / 12.0 SF per Chamber

Chambers = 1,680.0 SF / 12.0 SF = Min. 140 Chambers

Install 3 Zones, 4 Rows x 12 Chambers Long

Chambers Provided = 144 Total

Total Contact Area = 1,728.0 SF Actual

Total Contact Area = 1,680.0 SF Required

Note: Use of Alternative Chambers is Acceptable.

For ARIC 36 Standard Chambers (15.0 SF / Chamber, Min. 112
Chambers). Install 3 Zones with 4 Rows of 10 Chambers (120
Total). Contact Engineer for Clarification.

MAXIMUM DEPTH:

36" As Measured on the Up-Hill Side of the Excavation

TANK SIZES:

Main Tank Size = Min. 1,500 Gallons (Two-Compartment)

EPCCHD Approved Effluent Filter on Outlet

INSPECTIONS REQUIRED ARE AS FOLLOWS:

- 1.) Engineer Will Inspect the Installation of All OMTS Components (i.e. All Plumbing, Tanks, Pump Chamber, STA, etc.) Prior to Backfill.
- 2.) Engineer to Inspect the Soil Treatment Area After Backfill to Insure Min. Cover and Proper Drainage Away from Soil Treatment Area. Please Notify this Office Min. 24 Hours Prior to Inspection.

PIPE NOTES:

Provide 2.0% Min. Grade on Pipe to Septic Tank. Provide 2.0% Min. Grade on Pipe to the Soil Treatment Area.

All Bends Limited to 45 Degree Elbs or Long Sweep Quarter Bends. Areas Under Driveways Shall Be Protected as Per El Paso County Health Department Regulations.

Building Sewer Clean-Outs Shall Be Installed within 5 FT of the Structure and at Intervals Not to Exceed 100' in Straight Runs and When the Cumulative Change in Direction Exceeds 135 Degrees.

FINAL GRADING NOTES:

Soil Treatment Area Shall Be Crowned and Covered with a Minimum of 6" of Select Topsoil to Provide a Base for Good Vegetative Cover.

Contact Soil Conservation Service or County Extension Agent for Vegetation Best Suited for the Area. Grasses are Best. Trees and Shrubs May Damage/Block Pipes. Vegetation Shall Be Maintained and Mowed to Prevent Formation of Bic-Matting. Do Not Pave Over the Soil Treatment Area.

Provide Drainage Swale Around Uphill Side of the Soil Treatment Area.

HOMEOWNER RESPONSIBILITY:

- Have Septic Tank Pump Every 3-5 Years (or As Needed, Contact Licensed Pumpers)
- Have OMTS Inspected Annually
- Clean Effluent Filter
- Check Water Levels in Inspection Ports
- Plant Native Grass Over STA
- (No Plants with Roots or that Require Irrigation)
- Don't Pour Chemicals Down Drain
- Don't Throw Trash in Toilet
- (Minimize Toilet Paper Consumption)
- Use of Garbage Disposal is Discouraged
- Conserve Water and Repair Leaking Fixtures
- This is NOT a Complete List (Contact Local Health Department and EPA List of Septic "Do's and Don'ts")

GENERAL NOTES:

All Work per El Paso County Board of Health Regulations Chapter 8: On-Site Wastewater Treatment Systems (OMTS) Criteria.

All Setbacks Shall Conform to El Paso County Regulations (See Table 7-1 in the Regulations for Additional Information). Contractor/Homeowner Must Verify All Setbacks and Obtain Utility Clearances Prior to Construction.

Contractor/Homeowner is Responsible for Permit. Contractor/Homeowner Must Obtain Approval of Engineered OMTS from the El Paso County Health Department.

All Bends Limited to 45 Degree Elbs or Long Sweep Quarter Bends. Areas Under Driveways Shall Be Protected as Per El Paso County Health Department Regulations.

Building Sewer Clean-Outs Shall Be Installed within 5 FT of the Structure and at Intervals Not to Exceed 100 FT in Straight Runs. Upstream at Each Change of Direction Greater Than 45°, and at Any Combination of Bends Greater Than 45° within a 40 FT Section of Building Sewer.

Grade Surrounding Area to Drain Away from the Soil Treatment Area (STA).

Paving, Planting of Trees/Shrubs, Irrigation, Vehicular Traffic or Hoofed Animal Traffic of Any Kind Over the STA may Cause Premature Failure and is Prohibited.

Refer to Sheet 2, 3, and 4 for Additional Details and Information.

GEOQUEST, LLC.

6825 SILVER PONDS HEIGHTS

SUITE 101

COLORADO SPRINGS, CO

80908

OFFICE: (719) 481-4560

FAX: (719) 481-8204



Project Name and Address

Sheet: 1 of 4

Date: 2 July 2019

Revised:

Drawn by: yem

Checked by: dp

Village Homes
5290 Saxton Hollow Road
Lot #3, Filing #1,
Cathedral Pines Subdivision
Sch. No. 6201005003
El Paso County, Colorado

David May
10/24/19

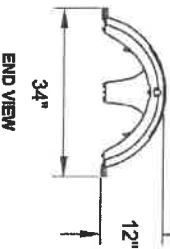
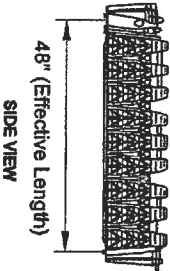
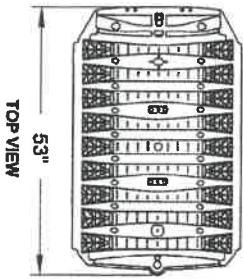
4" Ø PVC Solid Pipe Level Manifold (Typ. Each Zone)

4" Ø PVC Solid Pipe from Distribution Box to the Middle of Each Level Manifold

Remove All Native Topsoil within STA Footprint and Stockpile for Re-Use (Approx. 8" Native), then Remove Approx. 18" Native Material in the Area Each Chamber Bed. Scarify Bottom of Each Bed and Eliminate Bucket Smear on All Excavation Sidewalls (Prior to Placing Chambers. Typ. Each Bed). Max. 3 FT to the Bottom of the Chambers from Existing Grade as Measured on the Uphill Side of Each Chamber Bed.

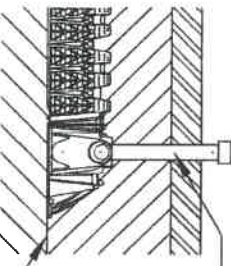
Distribution Box w/ Speed Levelers to Ensure Equal Distribution. Install a Access Riser or Sprinkler Box to Grade to Allow for Future Speed Leveler Adjustment.

4" Ø PVC Solid Pipe from Septic Tank to Distribution Box



Quick 4 Plus Standard Details

Not to Scale



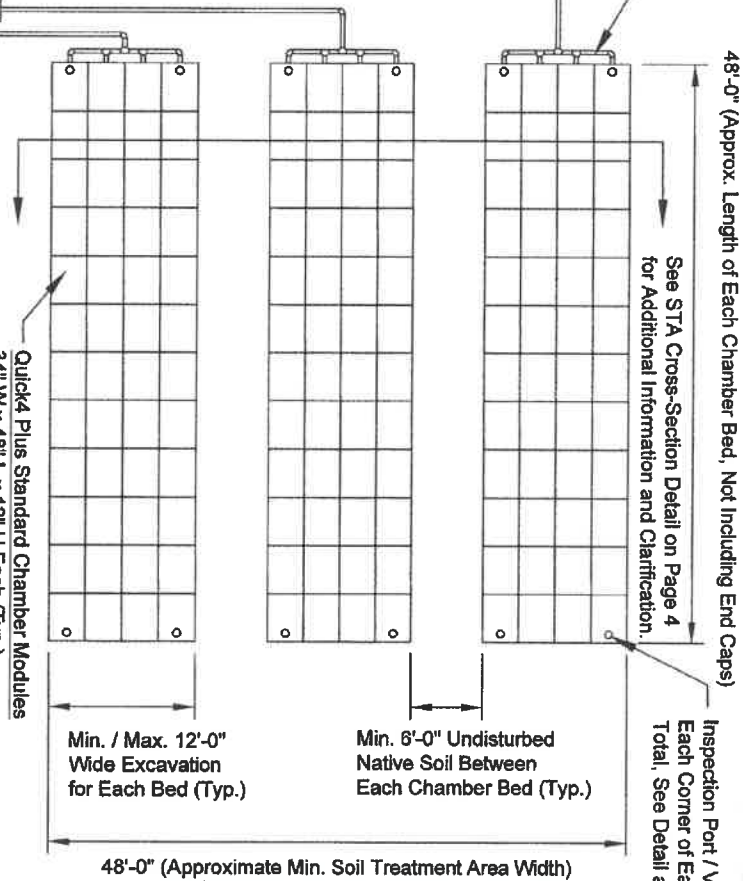
Inspection Port / Vent Detail

Not to Scale

Note: Use of Alternative Chambers is Acceptable. For ARC 36 Chambers (15.0 SF / Chamber, Min. 112 Chambers) Install 3 Beds: 4 Rows x 10 Chambers Long (120 Total Chambers) 3 Beds: 4 Rows x 12 Chambers Long (144 Total Chambers)

Soil Treatment Area (STA) Layout (Chamber Beds)

SCALE: 1" = 10'



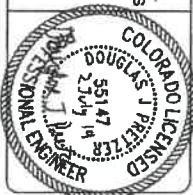
Native Slope: NNW @ ~6%

Note: Min. 6 FT Undisturbed Native Soil Between Zones. Each Bed Shall be Level End to End and Side to Side. Step Beds as Required by Native Slope. Max. 3 FT to the Bottom of the Chambers from Existing Grade as Measured on the Uphill Side of Each Chamber Bed.

GEOQUEST, LLC.

6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4580
FAX: (719) 481-9204



Project: 19-C-489	Project Name and Address
Sheet: 3 of 4	Village Homes
Date: 2 July 2019	5290 Saxton Hollow Road
Revised:	Lot #3, Filing #1,
Drawn By: vsm	Cathedral Pines Subdivision,
Checked By: djp	San. No. 6201005003
	El Paso County, Colorado

Handwritten signature and date:
10/2/19

Provide Min. 10" (36" Max.) Cover Over Top of Chambers with Min. 6" Topsoil. Install a Continuous Crowned Slope Over All Chamber Beds to Prevent Ponding of Precipitation. It is Acceptable to Cover Each Bed Individually if Desired. Special Care Shall be Taken to Grade the Area Between Beds to Prevent Ponding of Precipitation.

Plant w/ Native Grasses and Maintain (See Notes)

Native Slope: NNW @ ~6%

Roughen Sidewall Surface to Eliminate Bucket Smear (Typ. All Sides of Each Excavation)

Remove All Native Topsoil within STA Footprint and Stockpile for Re-Use (Approx. 8" Native), then Remove Approx. 18" Native Material in the Area Each Chamber Bed. Scarify Bottom of Each Bed and Eliminate Bucket Smear on All Excavation Sidewalls (Prior to Placing Chambers, Typ. Each Bed). Max. 3 FT to the Bottom of the Chambers from Existing Grade as Measured on the Uphill Side of Each Chamber Bed.

48'-0" (Approximate Min. Soil Treatment Area Width)

Min. 6'-0" Undisturbed Native Soil Between Chamber Beds

Min. / Max. 12'-0" Wide Excavation for Each Bed (Typ.)

Provide Positive Drainage Swale on Uphill Side to Divert Surface Precipitation Runoff Around the Soil Treatment Area (Min. 2% Grade)

Max. 3'-0" from Finish Grade as Measured on the Uphill Side of the Each Zone

Step Beds as Required by Native Slope. Chambers Shall be Set Level in Each Bed.

Roughen Sidewall Surface to Eliminate Bucket Smear (Typ. All Sides of Each Excavation)

Quick4 Plus Standard Chamber Modules
34" W x 48" L x 12" H Each (Typ.)
3 Beds: 4 Rows x 12 Chambers Long (144 Total Chambers)






Note: Use of Alternative Chambers is Acceptable. For ARC 36 Chambers (15.0 SF / Chamber, Min. 112 Chambers) Install 3 Beds: 4 Rows x 10 Chambers Long (120 Total Chambers) Contact Engineer for Clarification.

Special Note: STA Layout illustrates the General Design Layout. Minor Rotation or Curvature (ie. Less Than 15°) of the Soil Treatment Area (STA) Beds to Best Fit the Site Topography is Acceptable.

Soil Treatment Area (STA) Cross-Section (Chamber Beds)

Not to Scale

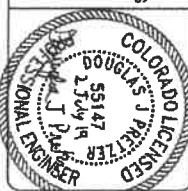
Note: Min. 6 FT Undisturbed Native Soil Between Zones. Each Bed Shall be Level End to End and Side to Side. Step Beds as Required by Native Slope. Max. 36" to the Bottom of the Chambers from Existing Grade as Measured on the Uphill Side of Each Chamber Bed.

-  Topsoil (Min. 6" on Final Cover)
-  Native Soil - Sandy Loam (USDA 2A, Approx. 8" - 35" Below Existing Grade)
-  Native Topsoil (Approx. 8", Remove Min. 6" from STA Footprint and Stockpile for Re-Use on Final Cover)
-  Native Soil - Sandy Clay Loam (USDA 3A, Approx. 35" - 8'-0" Below Existing Grade)
-  Approved Material to Provide Cover (Min. 10", Max. 36" Total, Including Topsoil)

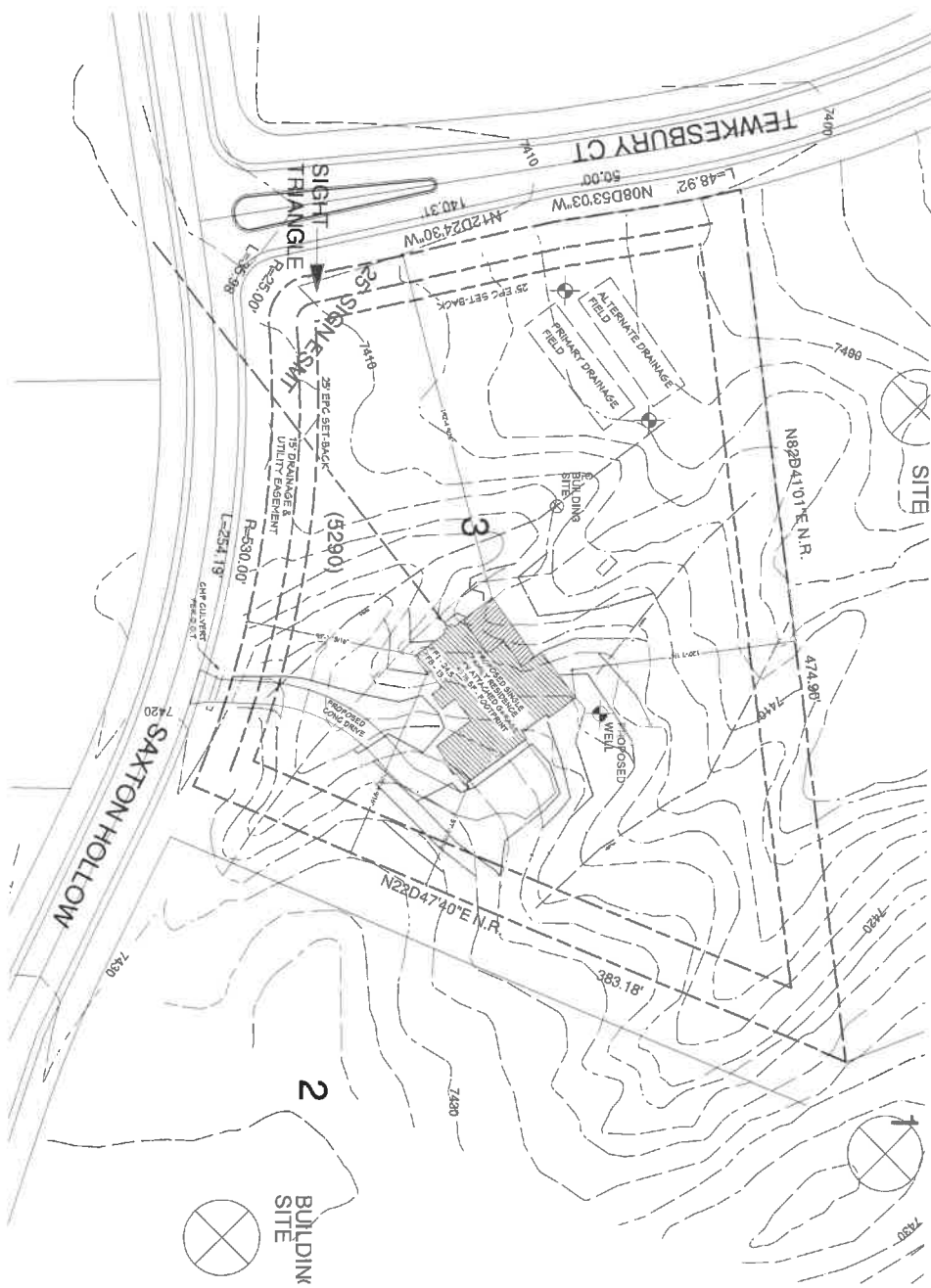
GEOQUEST, LLC.
8825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908
OFFICE: (719) 481-4860
FAX: (719) 481-9204

Project: 19-0489
Sheet: 4 of 4
Date: 2 July 2019
Revised:
Drawn by: xsm
Checked by: clp

Project Name and Address
Village Homes
5280 Seaton Hollow Road
Lot #3, Filing #1,
Cathedral Pines Subdivision,
Sch. No. 8201005003
El Paso County, Colorado



10/2/19



SITE PLAN

1" = 30'

SITE DATA
OWNER: ONEAL, NATURAL BAYVIEW
LEGAL DESCRIPTION: LOT 1, CATHEDRAL PINES SUB, PLANO NO. 1
LOT SIZE: 2.51 AC
TRACTOR: AERZEN SQ. FT.
BUILDING HEIGHT: 18'-0"
TAX SCHEDULE NO: 001005-002



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ITEMS BY VILLASREE HOMES, LLC AND DDD SERVICES

Sheet
C1 of 6

Revisions

Release
Date

JOB NO.
JOB NUMBER
C. REPAIR 1

Project
THE ONEAL RESIDENCE
5290 SAXTON HOLLOW

Subject
SITE PLAN



COMPUTER AIDED DESIGN
P.O. BOX 77152
COLORADO SPRINGS, CO 80970 (719) 637-0622